116TH CONGRESS 2D SESSION S.
To increase fairness and transparency in algorithmic eligibility determinations
IN THE SENATE OF THE UNITED STATES
introduced the following bill; which was read twice and referred to the Committee on

A BILL

To increase fairness and transparency in algorithmic eligibility determinations.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
- 4 (a) Short Title.—This Act may be cited as the
- 5 "Algorithmic Fairness Act of 2020".
- 6 (b) Table of Contents of Contents of
- 7 this Act is as follows:
 - Sec. 1. Short title; table of contents.
 - Sec. 2. Definitions.
 - Sec. 3. FTC study and report on ways companies are developing and implementing algorithmic eligibility determinations.
 - Sec. 4. Substantive fairness.
 - Sec. 5. Procedural fairness.
 - Sec. 6. Enforcement.
 - Sec. 7. Research grants for the study of fair and transparent data analytics.

Sec. 8. Leadership program. Sec. 9. Avoiding duplication.

1 SEC. 2. DEFINITIONS.

2	In	this	Act:
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(1) ALGORITHMIC ELIGIBILITY DETERMINA-TION.—The term "algorithmic eligibility determination" means a determination based in whole or in significant part on an algorithmic process that utilizes methods of machine learning, advanced statistical techniques, artificial intelligence, or similar techniques to determine the eligibility for, the denial of access to, the receipt of information about, the cost of acquiring, the opportunity to access, or the revocation of important opportunities including, but not limited to, education, employment, credit, health care insurance, and housing. (2) Commission.—The term "Commission" means the Federal Trade Commission. (3) COVERED ENTITY.—The term "covered entity" means an entity that— (A) makes an algorithmic eligibility determination; and (B) is— (i) a person over which the Commission has authority pursuant to section

5(a)(2) of the Federal Trade Commission

1	Act $(15 \text{ U.S.C. } 45(a)(2))$, but including
2	banks, savings and loan institutions, and
3	Federal credit unions that are otherwise
4	excluded under such section;
5	(ii) a common carrier subject to the
6	Communications Act of 1934 (47 U.S.C
7	151 et seq.), notwithstanding the definition
8	of the term "Acts to regulate commerce"
9	in section 4 of the Federal Trade Commis
10	sion Act (15 U.S.C. 44) and the exception
11	provided by section 5(a)(2) of the Federa
12	Trade Commission Act (15 U.S.C
13	45(a)(2)) for such carriers; or
14	(iii) a nonprofit organization, includ-
15	ing any organization described in section
16	501(c) of the Internal Revenue Code or
17	1986 that is exempt from taxation under
18	section 501(a) of such Code, notwith
19	standing the definition of the term "Acts
20	to regulate commerce" in section 4 of the
21	Federal Trade Commission Act (15 U.S.C
22	44) and the exception provided by section
23	5(a)(2) of the Federal Trade Commission
24	Act (15 U.S.C. 45(a)(2)) for such organi-
25	zations.

1	(4) Online advertisement.—The term "on-
2	line advertisement" means an algorithmic eligibility
3	determination that determines whether an individual
4	receives promotional information from a covered en-
5	tity through the use of paid internet or paid digital
6	communication.
7	(5) SEARCH RESULT.—The term "search re-
8	sult" means an algorithmic eligibility determination
9	that determines the information an individual is pre-
10	sented after querying an internet search engine.
11	SEC. 3. FTC STUDY AND REPORT ON WAYS COMPANIES ARE
12	DEVELOPING AND IMPLEMENTING ALGO-
13	RITHMIC ELIGIBILITY DETERMINATIONS.
13 14	(a) Study.—The Commission shall conduct a study
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14 15	(a) STUDY.—The Commission shall conduct a study on the ways covered entities are developing and imple-
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14 15 16 17 18 19 20 21	 (a) STUDY.—The Commission shall conduct a study on the ways covered entities are developing and implementing algorithmic eligibility determinations. Such study shall include an analysis of— (1) the industries that most commonly utilize algorithmic eligibility determinations; (2) the types of algorithmic eligibility determinations that covered entities make;
14 15 16 17 18 19 20 21	 (a) STUDY.—The Commission shall conduct a study on the ways covered entities are developing and implementing algorithmic eligibility determinations. Such study shall include an analysis of— (1) the industries that most commonly utilize algorithmic eligibility determinations; (2) the types of algorithmic eligibility determinations that covered entities make; (3) the data, data sources, pre-processing strat-

1	(4) the transparency of algorithmic eligibility
2	determinations, including the types of explanations
3	that covered entities disclose to—
4	(A) individuals or entities that are the sub-
5	ject of an algorithmic eligibility determination;
6	(B) regulators; and
7	(C) the general public;
8	(5) whether and how human decision makers
9	are involved in rendering algorithmic eligibility de-
10	terminations;
11	(6) whether covered entities have a mechanism
12	to receive complaints about algorithmic eligibility de-
13	terminations, and the number and nature of such
14	complaints received from individuals regarding such
15	determinations;
16	(7) whether covered entities have accountability
17	procedures in place should an algorithmic eligibility
18	determination be questioned or challenged, a de-
19	scription of such accountability procedures, and
20	what remedial steps covered entities have taken, if
21	any;
22	(8) what information a covered entity could rea-
23	sonably be required to disclose such that an indi-
24	vidual could understand, question, or challenge an
25	algorithmic eligibility determination;

1 (9) whether covered entities perform algo-2 rithmic audits to understand whether algorithmic eli-3 gibility determinations are fair, how covered entities define fairness for this purpose, and whether any 4 5 such audit techniques and outcomes of audits are 6 available to individuals or groups challenging an al-7 gorithmic eligibility determination; 8 (10) the extent to which, if any, algorithmic eli-9 gibility determinations consider factors such as geo-10 graphic information, income, ethnicity, race, religion, 11 national origin, age, sex, sexual orientation, dis-12 ability information, pregnancy, marital status, phys-13 ical or mental health status, criminal history status, 14 or proxies for such factors; 15 (11) the extent to which algorithmic eligibility 16 determinations could result in negative or differen-17 tial treatment of individuals based on the factors de-18 scribed in paragraph (10); and 19 (12) the best way to address intellectual prop-20 erty concerns of covered entities, like trade secret 21 protections, that may arise if the Federal Govern-22 ment requires companies to share information re-23 lated to their algorithmic eligibility determination 24 processes. 25 (b) Reports.—

1	(1) Initial report.—Not later than 1 year
2	after the date of the enactment of this Act, and once
3	every 3 years thereafter (until a total of 4 reports
4	have been submitted), the Commission shall submit
5	to Congress a report on the study conducted under
6	subsection (a), together with recommendations for
7	such additional legislation and administrative action
8	as the Commission determines appropriate.
9	(2) Special Rule.—In the final report sub-
10	mitted in accordance with paragraph (1), the Com-
11	mission shall include a recommendation as to wheth-
12	er to continue conducting the study under subsection
13	(a) (and submitting corresponding reports under this
14	subsection).
15	(c) Consultation.—In conducting the study under
16	subsection (a) and preparing the reports under subsection
17	(b), the Commission shall consult with—
18	(1) the National Institute of Standards and
19	Technology;
20	(2) the Department of Homeland Security;
21	(3) the Consumer Financial Protection Bureau;
22	(4) the Department of Housing and Urban De-
23	velopment;
24	(5) the Department of Health and Human
25	Services;

1	(6) the Department of Veterans Affairs;
2	(7) the Department of Education;
3	(8) the Federal Communications Commission;
4	(9) the Equal Employment Opportunity Com-
5	mission; and
6	(10) the Civil Rights Division of the Depart-
7	ment of Justice.
8	SEC. 4. SUBSTANTIVE FAIRNESS.
9	(a) In General.—A covered entity shall not act on
10	an unfair algorithmic eligibility determination in or affect-
11	ing commerce.
12	(b) Considerations.—In determining whether a
13	particular algorithmic eligibility determination is unfair,
14	the Commission—
15	(1) shall consider the factors specified in sec-
16	tion 5(n) of the Federal Trade Commission Act (15
17	U.S.C. $45(n)$; and
18	(2) may consider—
19	(A) established public policies;
20	(B) emotional distress, bias on the basis of
21	protected class status, and other noneconomic
22	injuries, and may conclude that these injuries
23	contribute to substantial injury to consumers
24	for the purposes of section 5(n) of the Federal
25	Trade Commission Act (15 U.S.C. 45(n)); and

1	(C) any code of conduct developed by in-
2	dustry sectors, civil rights groups, consumer
3	protection groups, or academics, as long as the
4	Commission has first published such code of
5	conduct in the Federal Register and provided
6	for a period of public comment in accordance
7	with section 553 of title 5, United States Code.
8	SEC. 5. PROCEDURAL FAIRNESS.
9	(a) In General.—Beginning 1 year after the date
10	of the enactment of this Act, each covered entity shall,
11	for each algorithmic eligibility determination—
12	(1) retain for at least 5 years an audit trail
13	that records—
14	(A) the data used by the algorithm, as it
15	existed at the time the algorithm was deployed
16	and rendered the algorithmic eligibility deter-
17	mination;
18	(B) the source of pre-processing tech-
19	niques, or any other technique used to produce
20	any such data described in subparagraph (A);
21	(C) the methodology used by the entity to
22	develop the algorithm;
23	(D) the version of the design of the algo-
24	rithm utilized to make the determination;

1	(E) any data or sets of data used to train
2	the algorithm;
3	(F) any testing for model performance for
4	discriminatory effects across different sub-
5	groups and the results of such testing;
6	(G) the methodology used to render the de-
7	termination; and
8	(H) the ultimate determination rendered;
9	(2) notify the individual that they have been the
10	subject of an algorithmic eligibility determination
11	and
12	(3) upon request, provide the individual with
13	the opportunity to—
14	(A) access the data pertaining to that indi-
15	vidual that the covered entity employed to make
16	the determination, in a human-readable format
17	that a reasonable individual can understand;
18	(B) submit corrections to the data per-
19	taining to that individual that the covered enti-
20	ty used in the algorithmic eligibility determina-
21	tion; and
22	(C) request that the covered entity conduct
23	a reevaluation of the relevant algorithmic eligi-
24	bility determination based on the corrected
25	data.

- 1 (b) REVIEW.—Upon the request of the Commission,
- 2 a covered entity shall make available to the Commission
- 3 the full audit trail described in subsection (a)(1). The
- 4 Commission shall establish a secure and confidential proc-
- 5 ess for reviewing the materials created and retained under
- 6 such subsection.
- 7 (c) Request to the Commission.—An individual
- 8 who has been the subject of an algorithmic eligibility de-
- 9 termination may request that the Commission conduct a
- 10 review (and the Commission may conduct such a review)
- 11 of—
- 12 (1) the algorithmic eligibility determination to
- determine if it was unfair (determined pursuant to
- section (4); and
- 15 (2) a covered entity's reevaluation of an algo-
- 16 rithmic eligibility determination where an individual
- has submitted corrected data.
- 18 (d) Rule of Construction.—Nothing in this sec-
- 19 tion shall be construed to require a covered entity to pro-
- 20 vide an individual with the algorithm or model used to
- 21 make the eligibility determination, or otherwise divulge le-
- 22 gally protected trade secrets.
- 23 (e) Scope.—Notwithstanding any of the preceding
- 24 provisions of this section, subsection (a)(2) shall not apply
- 25 to—

1	(1) online advertisements;
2	(2) search results; or
3	(3) any other use case for which the Commis-
4	sion determines, by rulemaking in accordance with
5	section 553 of title 5, United States Code, that the
6	requirements of subsection (a)(2) would impose an
7	undue burden on or prove to be infeasible for that
8	general class of use case.
9	SEC. 6. ENFORCEMENT.
10	(a) Enforcement by the Federal Trade Com-
11	MISSION.—
12	(1) Unfair act or practice.—Any covered
13	entity that violates section 4 or section 5 shall be
14	deemed to have committed an unfair act or practice
15	under section 5(a)(1) of the Federal Trade Commis-
16	sion Act (15 U.S.C. 45(a)(1)).
17	(2) Powers of the commission.—
18	(A) In General.—The Commission shall
19	enforce sections 4 and 5 in the same manner,
20	by the same means, and with the same jurisdic-
21	tion, powers, and duties as though all applicable
22	terms and provisions of the Federal Trade
23	Commission Act (15 U.S.C. 41 et seq.) were in-
24	corporated into and made a part of this section.

1	(B) CIVIL PENALTY AUTHORITY.—When
2	enforcing section 4 or 5, the Commission may
3	depending on the nature and severity of the vio-
4	lation, include an assessment of a civil penalty
5	in the cease and desist order provided for under
6	section 5(b) of the Federal Trade Commission
7	Act (15 U.S.C. 45).
8	(C) Privileges and immunities.—Any
9	covered entity that violates section 4 or 5 shall
10	be subject to the penalties and entitled to the
11	privileges and immunities provided in the Fed-
12	eral Trade Commission Act (15 U.S.C. 41 et
13	seq.).
14	(D) AUTHORITY PRESERVED.—Nothing in
15	this subsection shall be construed to limit the
16	authority of the Commission under any other
17	provision of law.
18	(b) Regulations.—
19	(1) In general.—The Commission may pro-
20	mulgate, in accordance with section 553 of title 5
21	United States Code, regulations to—
22	(A) carry out section 4, including by de-
23	scribing which algorithmic eligibility determina-
24	tions are unfair for the purposes of section 5 of

1	the Federal Trade Commission Act (15 U.S.C.
2	45); and
3	(B) carry out section 5.
4	(2) No requirement for regulations.—
5	Nothing in this Act shall require the Commission to
6	promulgate regulations before enforcing violations of
7	section 4 or 5.
8	(c) Referral Regarding a Potential Violation
9	OF A FEDERAL ANTI-DISCRIMINATION LAW.—If the Com-
10	mission finds that an algorithmic eligibility determination
11	may be in violation of a Federal anti-discrimination law,
12	the Commission shall refer the matter to the appropriate
13	Federal or State agency with authority to initiate pro-
13 14	Federal or State agency with authority to initiate proceedings relating to such violation.
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14	ceedings relating to such violation.
14 15	ceedings relating to such violation. SEC. 7. RESEARCH GRANTS FOR THE STUDY OF FAIR AND
14151617	ceedings relating to such violation. SEC. 7. RESEARCH GRANTS FOR THE STUDY OF FAIR AND TRANSPARENT DATA ANALYTICS.
14151617	ceedings relating to such violation. SEC. 7. RESEARCH GRANTS FOR THE STUDY OF FAIR AND TRANSPARENT DATA ANALYTICS. (a) Grant Authority.—The Director of the Na-
14 15 16 17 18	ceedings relating to such violation. SEC. 7. RESEARCH GRANTS FOR THE STUDY OF FAIR AND TRANSPARENT DATA ANALYTICS. (a) Grant Authority.—The Director of the National Institute of Standards and Technology may award
141516171819	ceedings relating to such violation. SEC. 7. RESEARCH GRANTS FOR THE STUDY OF FAIR AND TRANSPARENT DATA ANALYTICS. (a) Grant Authority.—The Director of the National Institute of Standards and Technology may award grants for research into fair, accountable, and transparent
14 15 16 17 18 19 20	ceedings relating to such violation. SEC. 7. RESEARCH GRANTS FOR THE STUDY OF FAIR AND TRANSPARENT DATA ANALYTICS. (a) GRANT AUTHORITY.—The Director of the National Institute of Standards and Technology may award grants for research into fair, accountable, and transparent data analytics and machine learning, particularly with re-
14 15 16 17 18 19 20 21	ceedings relating to such violation. SEC. 7. RESEARCH GRANTS FOR THE STUDY OF FAIR AND TRANSPARENT DATA ANALYTICS. (a) Grant Authority.—The Director of the National Institute of Standards and Technology may award grants for research into fair, accountable, and transparent data analytics and machine learning, particularly with respect to algorithmic eligibility determinations.

1 under the preceding sentence shall remain available until

3 SEC. 8. LEADERSHIP PROGRAM.

- 4 (a) IN GENERAL.—By not later than 1 year after the
- 5 date of the enactment of this Act, the Commission shall
- 6 establish a leadership program under which the Commis-
- 7 sion recognizes covered entities that display excellence in
- 8 fair, accountable, and transparent data science or machine
- 9 learning, particularly with respect to algorithmic eligibility
- 10 determinations.

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expended.

- 11 (b) Process.—Such leadership program shall in-
- 12 clude a process for—
- 13 (1) covered entities to apply to the Commission
- 14 for such recognition;
- 15 (2) the Commission, in consultation with the
- National Institute of Standards and Technology, to
- evaluate the merits of applications in accordance
- with standards that the Commission shall promul-
- gate as a rule under section 553 of title 5, United
- 20 States Code; and
- 21 (3) recognizing covered entities that the Com-
- 22 mission determines have achieved excellence in fair,
- accountable, and transparent data science or ma-
- chine learning, particularly with respect to algo-
- 25 rithmic eligibility determinations.

1 SEC. 9. AVOIDING DUPLICATION.

- 2 In implementing the provisions of this Act, the Com-
- 3 mission shall work with other Federal agencies to avoid
- 4 the burden on a covered entity from having to comply with
- 5 requirements under this Act that may be duplicative of
- 6 requirements under other provisions of Federal law.